

Kenneth J Shea

List of Publications by Citations

Source: <https://exaly.com/author-pdf/443138/kenneth-j-shea-publications-by-citations.pdf>

Version: 2024-04-27

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

245
papers

11,996
citations

59
h-index

99
g-index

277
ext. papers

12,844
ext. citations

9.2
avg, IF

6.4
L-index

#	Paper	IF	Citations
245	Bridged Polysilsesquioxanes. Highly Porous Hybrid Organic-Inorganic Materials. <i>Chemical Reviews</i> , 1995 , 95, 1431-1442	68.1	840
244	Recognition, neutralization, and clearance of target peptides in the bloodstream of living mice by molecularly imprinted polymer nanoparticles: a plastic antibody. <i>Journal of the American Chemical Society</i> , 2010 , 132, 6644-5	16.4	388
243	Selective protein capture by epitope imprinting. <i>Angewandte Chemie - International Edition</i> , 2006 , 45, 2392-6	16.4	373
242	Influence of polymer morphology on the ability of imprinted network polymers to resolve enantiomers. <i>Journal of Chromatography A</i> , 1993 , 635, 31-49	4.5	347
241	Alternating droplet generation and controlled dynamic droplet fusion in microfluidic device for CdS nanoparticle synthesis. <i>Lab on A Chip</i> , 2006 , 6, 174-8	7.2	339
240	Peptide imprinted polymer nanoparticles: a plastic antibody. <i>Journal of the American Chemical Society</i> , 2008 , 130, 15242-3	16.4	327
239	Electric-field-induced wetting and dewetting in single hydrophobic nanopores. <i>Nature Nanotechnology</i> , 2011 , 6, 798-802	28.7	230
238	Polymer complements to nucleotide bases. Selective binding of adenine derivatives to imprinted polymers. <i>Journal of the American Chemical Society</i> , 1993 , 115, 3368-3369	16.4	205
237	Alkylene-bridged silsesquioxane sol-gel synthesis and xerogel characterization. Molecular requirements for porosity. <i>Chemistry of Materials</i> , 1993 , 5, 943-950	9.6	171
236	Chiral ion-exchange chromatography. Correlation between solute retention and a theoretical ion-exchange model using imprinted polymers. <i>Journal of Chromatography A</i> , 1993 , 654, 17-28	4.5	171
235	Origin of peak asymmetry and the effect of temperature on solute retention in enantiomer separations on imprinted chiral stationary phases. <i>Journal of Chromatography A</i> , 1995 , 690, 29-39	4.5	170
234	Designed catalysts. A synthetic network polymer that catalyzes the dehydrofluorination of 4-fluoro-4-(p-nitrophenyl)butan-2-one. <i>Journal of the American Chemical Society</i> , 1994 , 116, 379-380	16.4	161
233	The Type 2 Intramolecular Diels-Alder Reaction: Synthesis and Chemistry of Bridgehead Alkenes. <i>Angewandte Chemie - International Edition</i> , 2001 , 40, 820-849	16.4	158
232	The rational design of a synthetic polymer nanoparticle that neutralizes a toxic peptide in vivo. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012 , 109, 33-8	11.5	152
231	Disposable tethers in synthetic organic chemistry. <i>Tetrahedron</i> , 1998 , 54, 2289-2338	2.4	134
230	An analysis of small-molecule binding to functionalized synthetic polymers by ¹³ C CP/MAS NMR and FT-IR spectroscopy. <i>Journal of the American Chemical Society</i> , 1991 , 113, 4109-4120	16.4	134
229	Aryl-bridged polysilsesquioxanes--new microporous materials. <i>Chemistry of Materials</i> , 1989 , 1, 572-574	9.6	129

228	Temperature-responsive "catch and release" of proteins by using multifunctional polymer-based nanoparticles. <i>Angewandte Chemie - International Edition</i> , 2012 , 51, 2405-8	16.4	125
227	Recent developments in the synthesis, structure and chemistry of bridgehead alkenes. <i>Tetrahedron</i> , 1980 , 36, 1683-1715	2.4	124
226	Synthetic peptide receptors: molecularly imprinted polymers for the recognition of peptides using peptide-metal interactions. <i>Journal of the American Chemical Society</i> , 2001 , 123, 2072-3	16.4	122
225	Enantioselective ester hydrolysis catalyzed by imprinted polymers. <i>Journal of Organic Chemistry</i> , 2000 , 65, 4009-27	4.2	118
224	Biomimetic Design of Mussel-Derived Bioactive Peptides for Dual-Functionalization of Titanium-Based Biomaterials. <i>Journal of the American Chemical Society</i> , 2016 , 138, 15078-15086	16.4	112
223	Combinatorial methods in molecular imprinting. <i>Current Opinion in Chemical Biology</i> , 2003 , 7, 434-42	9.7	111
222	A mechanistic investigation of gelation. The sol-gel polymerization of precursors to bridged polysilsesquioxanes. <i>Accounts of Chemical Research</i> , 2001 , 34, 707-16	24.3	110
221	Synthesis and characterization of highly crosslinked poly(acrylamides) and poly(methacrylamides). A new class of macroporous polyamides. <i>Macromolecules</i> , 1990 , 23, 4497-4507	5.5	101
220	Dynamic introduction of cell adhesive factor via reversible multivalent phenylboronic acid/cis-diol polymeric complexes. <i>Journal of the American Chemical Society</i> , 2014 , 136, 6203-6	16.4	98
219	Synthetic polymer nanoparticles with antibody-like affinity for a hydrophilic peptide. <i>ACS Nano</i> , 2010 , 4, 199-204	16.7	98
218	Discrimination between Enantiomers of Structurally Related Molecules: Separation of Benzodiazepines by Molecularly Imprinted Polymers. <i>Journal of the American Chemical Society</i> , 2000 , 122, 460-465	16.4	96
217	Alkylene-bridged polysilsesquioxane aerogels: highly porous hybrid organic-inorganic materials. <i>Journal of Non-Crystalline Solids</i> , 1995 , 186, 44-53	3.9	96
216	Enantioselective ester hydrolysis catalyzed by imprinted polymers. <i>Tetrahedron: Asymmetry</i> , 1994 , 5, 1403-1406		95
215	A synthesis of the welwistatin core. <i>Organic Letters</i> , 2006 , 8, 5287-9	6.2	90
214	Design of synthetic polymer nanoparticles that capture and neutralize a toxic peptide. <i>Small</i> , 2009 , 5, 1562-8	11	89
213	Direct Formation of Aerogels by Sol-Gel Polymerizations of Alkoxysilanes in Supercritical Carbon Dioxide. <i>Chemistry of Materials</i> , 1997 , 9, 2264-2268	9.6	89
212	The boron-catalyzed polymerization of dimethylsulfoxonium methyllide. A living polymethylene synthesis. <i>Journal of the American Chemical Society</i> , 2002 , 124, 3636-46	16.4	89
211	A polymer nanoparticle with engineered affinity for a vascular endothelial growth factor (VEGF). <i>Nature Chemistry</i> , 2017 , 9, 715-722	17.6	88

210	Sol-Gel Synthesis of Hybrid Organic-Inorganic Materials. Hexylene- and Phenylene-Bridged Polysiloxanes. <i>Chemistry of Materials</i> , 1996 , 8, 656-663	9.6	87
209	Polyhomologation. A living C1 polymerization. <i>Accounts of Chemical Research</i> , 2010 , 43, 1420-33	24.3	84
208	The evolution of plastic antibodies. <i>Journal of Materials Chemistry</i> , 2011 , 21, 3517-3521		83
207	Photodeformable spherical hybrid nanoparticles. <i>Journal of the American Chemical Society</i> , 2006 , 128, 14250-1	16.4	83
206	Organo-silica hybrid functional nanomaterials: how do organic bridging groups and silsesquioxane moieties work hand-in-hand?. <i>Chemical Society Reviews</i> , 2011 , 40, 688-95	58.5	81
205	Affinity purification of multifunctional polymer nanoparticles. <i>Journal of the American Chemical Society</i> , 2010 , 132, 13648-50	16.4	81
204	Applications of Organic Bridged Polysilsesquioxane Xerogels to Nonlinear Optical Materials by the Sol-Gel Method. <i>Chemistry of Materials</i> , 1995 , 7, 493-498	9.6	81
203	Chiral polymers of intrinsic microporosity: selective membrane permeation of enantiomers. <i>Angewandte Chemie - International Edition</i> , 2015 , 54, 11214-8	16.4	80
202	Binding of Nucleotide Bases by Imprinted Polymers. <i>Macromolecules</i> , 1998 , 31, 2160-2165	5.5	78
201	Influence of strain on chemical reactivity. Relative reactivity of torsionally distorted double bonds in MCPBA epoxidations. <i>Journal of the American Chemical Society</i> , 1992 , 114, 3044-3051	16.4	78
200	Synthetic polymer nanoparticle-polysaccharide interactions: a systematic study. <i>Journal of the American Chemical Society</i> , 2012 , 134, 2681-90	16.4	77
199	High-contrast solid-state electrochromic devices of viologen-bridged polysilsesquioxane nanoparticles fabricated by layer-by-layer assembly. <i>ACS Applied Materials & Interfaces</i> , 2009 , 1, 83-9	9.5	72
198	Engineered synthetic polymer nanoparticles as IgG affinity ligands. <i>Journal of the American Chemical Society</i> , 2012 , 134, 15765-72	16.4	71
197	Squeezing ionic liquids through nanopores. <i>Nano Letters</i> , 2009 , 9, 2125-8	11.5	70
196	Template synthesis of macromolecules. Synthesis and chemistry of functionalized macroporous poly(divinylbenzene). <i>Journal of the American Chemical Society</i> , 1980 , 102, 3149-3155	16.4	70
195	Molecular Imprinting of Carboxylic Acids Employing Novel Functional Macroporous Polymers. <i>Journal of Organic Chemistry</i> , 1999 , 64, 4627-4634	4.2	69
194	Polyhomologation: Synthesis of Novel Polymethylene Architectures by a Living Polymerization of Dimethylsulfoxonium Methylide. <i>Angewandte Chemie - International Edition</i> , 1998 , 37, 1391-1393	16.4	68
193	Dual function catalysts. Dehydrogenation and asymmetric intramolecular Diels-Alder cycloaddition of N-hydroxy formate esters and hydroxamic acids: evidence for a ruthenium-acylnitroso intermediate. <i>Journal of the American Chemical Society</i> , 2005 , 127, 3678-9	16.4	64

- 192 Applications of the intramolecular Diels-Alder reaction to the formation of strained molecules. Synthesis of bridgehead alkenes. *Journal of the American Chemical Society*, **1982**, 104, 5708-5715 16.4 64
- 191 Cyclization Phenomena in the Sol-Gel Polymerization of β , β -Bis(triethoxysilyl)alkanes and Incorporation of the Cyclic Structures into Network Silsesquioxane Polymers. *Journal of the American Chemical Society*, **1999**, 121, 5413-5425 16.4 63
- 190 Molecular Imprinting for the Recognition of N-Terminal Histidine Peptides in Aqueous Solution. *Macromolecules*, **2002**, 35, 6192-6201 5.5 62
- 189 Tuning the Protein Corona of Hydrogel Nanoparticles: The Synthesis of Abiotic Protein and Peptide Affinity Reagents. *Accounts of Chemical Research*, **2016**, 49, 1200-10 24.3 61
- 188 Influence of strain on chemical reactivity. Relative reactivity of torsionally strained double bonds in 1,3-dipolar cycloadditions. *Journal of the American Chemical Society*, **1992**, 114, 4846-4855 16.4 61
- 187 Fluorescence probes for evaluating chain solvation in network polymers. An analysis of the solvatochromic shift of the dansyl probe in macroporous styrene-divinylbenzene and styrene-diisopropenylbenzene copolymers. *Macromolecules*, **1989**, 22, 1722-1730 5.5 59
- 186 Intramolekulare Diels-Alder-Reaktion vom Typ 2: Synthese und Chemie von Brückenkopf-Alkenen. *Angewandte Chemie*, **2001**, 113, 864-894 3.6 58
- 185 Copper(II)-catalyzed room temperature aerobic oxidation of hydroxamic acids and hydrazides to acyl-nitroso and azo intermediates, and their Diels-Alder trapping. *Organic Letters*, **2011**, 13, 3442-5 6.2 56
- 184 Polymer nanoparticle-protein interface. Evaluation of the contribution of positively charged functional groups to protein affinity. *ACS Applied Materials & Interfaces*, **2013**, 5, 374-9 9.5 54
- 183 Template synthesis of macromolecules. Selective functionalization of an organic polymer. *Journal of Organic Chemistry*, **1978**, 43, 4253-4255 4.2 54
- 182 Selective Protein Capture by Epitope Imprinting. *Angewandte Chemie*, **2006**, 118, 2452-2456 3.6 53
- 181 Intramolecular Diels-Alder reactions. A new entry into bridgehead bicyclo[3.n.1]alkenes. *Journal of the American Chemical Society*, **1978**, 100, 6519-6521 16.4 53
- 180 Functional Molecularly Imprinted Polymer Microstructures Fabricated Using Microstereolithography. *Advanced Materials*, **2003**, 15, 1541-1544 24 52
- 179 The polyhomologation of 1-boraadamantane: mapping the migration pathways of a propagating macrotricyclic trialkylborane. *Journal of the American Chemical Society*, **2003**, 125, 12179-95 16.4 52
- 178 Investigation into the scope and limitations of molecular imprinting with DNA molecules. *Analytica Chimica Acta*, **2001**, 435, 65-74 6.6 52
- 177 Efficient capture, rapid killing and ultrasensitive detection of bacteria by a nano-decorated multi-functional electrode sensor. *Biosensors and Bioelectronics*, **2018**, 101, 52-59 11.8 51
- 176 Arylene- and alkylene-bridged polysilsesquioxanes. *Journal of Non-Crystalline Solids*, **1993**, 160, 234-246 3.9 51
- 175 Preparation of Nano-Sized Chromium Clusters and Intimate Mixtures of Chromium/CdS Phases in a Porous Hybrid Xerogel by an Internal Doping Method. *Journal of the American Chemical Society*, **1994**, 116, 9052-9060 16.4 50

174	The intramolecular Diels-Alder cycloaddition of N-dienoyl acrylimidates. An efficient approach for the synthesis of hexahydroisoquinolones and hexahydroisoindolones. <i>Journal of Organic Chemistry</i> , 1989 , 54, 4335-4344	4.2	49
173	Engineering the Protein Corona of a Synthetic Polymer Nanoparticle for Broad-Spectrum Sequestration and Neutralization of Venomous Biomacromolecules. <i>Journal of the American Chemical Society</i> , 2016 , 138, 16604-16607	16.4	49
172	Design of Synthetic Polymer Nanoparticles That Facilitate Resolubilization and Refolding of Aggregated Positively Charged Lysozyme. <i>Journal of the American Chemical Society</i> , 2016 , 138, 4282-5	16.4	48
171	Photoresponsive Hybrid Materials: Synthesis and Characterization of Coumarin-Dimer-Bridged Polysilsesquioxanes. <i>Chemistry of Materials</i> , 2008 , 20, 1870-1876	9.6	48
170	ELISA-mimic screen for synthetic polymer nanoparticles with high affinity to target proteins. <i>Biomacromolecules</i> , 2012 , 13, 2952-7	6.9	46
169	Hybrid Polyelectrolyte Materials for Fuel Cell Applications: Design, Synthesis, and Evaluation of Proton-Conducting Bridged Polysilsesquioxanes. <i>Chemistry of Materials</i> , 2006 , 18, 3665-3673	9.6	46
168	Ersatz EthylenePropylene Copolymers: The Synthesis of Linear Carbon Backbone Copolymers One Carbon Atom at a Time. <i>Journal of the American Chemical Society</i> , 2000 , 122, 11515-11516	16.4	46
167	Polymer nanoparticle hydrogels with autonomous affinity switching for the protection of proteins from thermal stress. <i>Angewandte Chemie - International Edition</i> , 2014 , 53, 9275-9	16.4	44
166	Strategies for the generation of molecularly imprinted polymeric nitroxide catalysts. <i>Organic Letters</i> , 2005 , 7, 4879-82	6.2	44
165	Molecularly imprinted hollow spheres for the solid phase extraction of estrogens. <i>Talanta</i> , 2015 , 140, 68-72	6.2	43
164	A sol-gel derived pH-responsive bovine serum albumin molecularly imprinted poly(ionic liquids) on the surface of multiwall carbon nanotubes. <i>Analytica Chimica Acta</i> , 2016 , 932, 29-40	6.6	43
163	BH3-catalyzed oligomerization of ethyl diazoacetate: the role of C-boron enolates. <i>Journal of the American Chemical Society</i> , 2007 , 129, 4981-91	16.4	42
162	Particle deformation and concentration polarization in electroosmotic transport of hydrogels through pores. <i>ACS Nano</i> , 2013 , 7, 3720-8	16.7	41
161	Screening of 5-HT1A receptor antagonists using molecularly imprinted polymers. <i>Journal of the American Chemical Society</i> , 2007 , 129, 1680-9	16.4	41
160	Ferrocene-based metalorganic framework nanosheets loaded with palladium as a super-high active hydrogenation catalyst. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 15975-15980	13	40
159	Synthesis of the bicyclic welwitindolinone core via an alkylation/cyclization cascade reaction. <i>Organic Letters</i> , 2009 , 11, 5330-3	6.2	39
158	Structure of Arylene-Bridged Polysilsesquioxane Xerogels and Aerogels. <i>Chemistry of Materials</i> , 2004 , 16, 1402-1410	9.6	39
157	Polyhomologation: the living polymerization of ylides. <i>Chemistry - A European Journal</i> , 2000 , 6, 1113-9	4.8	39

156	Preparation of abiotic polymer nanoparticles for sequestration and neutralization of a target peptide toxin. <i>Nature Protocols</i> , 2015 , 10, 595-604	18.8	38
155	Type 2 intramolecular N-acylnitroso Diels-Alder reaction: scope and application to the synthesis of medium ring lactams. <i>Journal of Organic Chemistry</i> , 2004 , 69, 3025-35	4.2	38
154	Living Polymerization of Sulfur Ylides. Synthesis of Terminally Functionalized and Telechelic Polymethylene. <i>Macromolecules</i> , 2002 , 35, 8330-8337	5.5	38
153	Diastereomeric transition states. Relative energies of the chair and boat reaction pathways in the Cope rearrangement. <i>Journal of the American Chemical Society</i> , 1980 , 102, 3156-3162	16.4	38
152	Preparation, Properties, and Supercooling Prevention of Phase Change Materialn-Octadecane Microcapsules with Peppermint Fragrance Scent. <i>Industrial & Engineering Chemistry Research</i> , 2015 , 54, 8130-8136	3.9	37
151	Synthesis of a C-1 epi taxinine intermediate using the type 2 intramolecular Diels-Alder approach. <i>Tetrahedron Letters</i> , 1994 , 35, 1317-1320	2	37
150	Epitope discovery for a synthetic polymer nanoparticle: a new strategy for developing a peptide tag. <i>Journal of the American Chemical Society</i> , 2014 , 136, 1194-7	16.4	36
149	Spherical, monodisperse, functional bridged polysilsesquioxane nanoparticles. <i>Nano Letters</i> , 2007 , 7, 2684-7	11.5	36
148	Protein recognition by a surface imprinted colloidal array. <i>Journal of Materials Chemistry A</i> , 2014 , 2, 7165-71	3	35
147	Synthesis of Polymethylene Block Copolymers by the Polyhomologation of Organoboranes. <i>Macromolecules</i> , 1999 , 32, 3157-3158	5.5	35
146	New Architectures in Hydrogen Bond Catalysis. <i>Tetrahedron Letters</i> , 2009 , 50, 6830-6833	2	34
145	Polymethylene-block-poly(dimethyl siloxane)-block-polymethylene nanoaggregates in toluene at room temperature. <i>Polymer</i> , 2007 , 48, 4123-4129	3.9	34
144	The Tricyclo[9.3.1.0 ^{3,8}]pentadecane System[A Short Synthesis of a C-Aromatic Taxane Skeleton. <i>Angewandte Chemie International Edition in English</i> , 1983 , 22, 419-420		34
143	Learning and discrimination of cuticular hydrocarbons in a social insect. <i>Biology Letters</i> , 2012 , 8, 17-20	3.6	33
142	Deciphering the chemical basis of nestmate recognition. <i>Journal of Chemical Ecology</i> , 2010 , 36, 751-8	2.7	33
141	Intramolecular Condensation Reactions of β,β -Bis(triethoxysilyl)alkanes. Formation of Cyclic Disilsesquioxanes. <i>Journal of the American Chemical Society</i> , 1996 , 118, 8501-8502	16.4	33
140	An approach to the synthesis of stenine. <i>Organic Letters</i> , 2007 , 9, 2269-71	6.2	32
139	Chemically modified dansyl probes: a fluorescent diagnostic for ion and proton detection in solution and in polymers. <i>Organic Letters</i> , 2006 , 8, 1581-4	6.2	32

138	Polymerization of Bis(triethoxysilyl)ethenes. Impact of Substitution Geometry on the Formation of Ethenylene- and Vinylidene-Bridged Polysilsesquioxanes. <i>Chemistry of Materials</i> , 1998 , 10, 4129-4140	9.6	32
137	Stereochemistry of the Cope rearrangement and mechanism of thermal aromatization of 3,3'-bicyclopropenyls. <i>Journal of the American Chemical Society</i> , 1977 , 99, 1499-1507	16.4	32
136	Effect of pH on the Gelation Time of Hexylene-Bridged Polysilsesquioxanes. <i>Chemistry of Materials</i> , 2004 , 16, 2041-2043	9.6	31
135	Type 2 intramolecular N-acylnitroso diels-alder reaction: stereoselective synthesis of bridged bicyclic oxazinolactams. <i>Organic Letters</i> , 2002 , 4, 2637-40	6.2	31
134	1-Boraadamantane blows its top, sometimes. The mono- and polyhomologation of 1-boraadamantane. <i>Organic Letters</i> , 2001 , 3, 3063-6	6.2	31
133	Synthesis of Poly(methylene-b-styrene) by Sequential Living Polymerization. <i>Macromolecules</i> , 2001 , 34, 3111-3114	5.5	30
132	Dialkylene Carbonate-Bridged Polysilsesquioxanes. Hybrid Organic/Inorganic Sol-Gels with a Thermally Labile Bridging Group. <i>Chemistry of Materials</i> , 1999 , 11, 3333-3341	9.6	30
131	Molecular imprinted photonic crystal for sensing of biomolecules. <i>Molecular Imprinting</i> , 2016 , 4, 1-12		30
130	Preparation of high encapsulation efficiency fragrance microcapsules and their application in textiles. <i>RSC Advances</i> , 2016 , 6, 80924-80933	3.7	30
129	Light-triggered charge reversal of organic-silica hybrid nanoparticles. <i>Journal of the American Chemical Society</i> , 2012 , 134, 11072-5	16.4	29
128	Uniform, Spherical Bridged Polysilsesquioxane Nano- and Microparticles by a Nonemulsion Method. <i>Chemistry of Materials</i> , 2010 , 22, 5244-5250	9.6	29
127	Polymer antidotes for toxin sequestration. <i>Advanced Drug Delivery Reviews</i> , 2015 , 90, 81-100	18.5	28
126	The scent of supercolonies: the discovery, synthesis and behavioural verification of ant colony recognition cues. <i>BMC Biology</i> , 2009 , 7, 71	7.3	28
125	Type 2 intramolecular N-acylazo Diels-Alder reaction: regio- and stereoselective synthesis of bridgehead bicyclic 1,2-diazines. <i>Journal of Organic Chemistry</i> , 2007 , 72, 6816-23	4.2	28
124	Synthesis and chemistry of a bridgehead enol lactone. <i>Journal of the American Chemical Society</i> , 1982 , 104, 5715-5719	16.4	28
123	Intramolecular diels-alder cycloadditions. Synthesis of substituted derivatives of bicyclo[3.n.1]bridgehead alkenes.. <i>Tetrahedron Letters</i> , 1979 , 20, 1011-1014	2	26
122	Design of multi-functional linear polymers that capture and neutralize a toxic peptide: a comparison with cross-linked nanoparticles. <i>Journal of Materials Chemistry B</i> , 2015 , 3, 1706-1711	7.3	25
121	Vinyl imidates in cycloaddition reactions: synthesis of (H)-alloyohimbane. <i>Tetrahedron Letters</i> , 2000 , 41, 6721-6724	2	25

120	New procedures for the preparation of CdS and heterogeneous Cr/CdS phases in hybrid xerogel matrixes. Pore structure analysis and characterization. <i>The Journal of Physical Chemistry</i> , 1995 , 99, 4720-4732	25
119	Synthesis of bridgehead enol lactones via type 2 intramolecular Diels-Alder cycloaddition. New intermediates for stereocontrolled organic synthesis. <i>Journal of the American Chemical Society</i> , 1987 , 109, 447-452	16.4 25
118	Measuring melittin uptake into hydrogel nanoparticles with near-infrared single nanoparticle surface plasmon resonance microscopy. <i>Analytical Chemistry</i> , 2015 , 87, 4973-9	7.8 24
117	Type 2 intramolecular nitroso Diels-Alder reaction. Synthesis and structure of bridgehead oxazinolactams. <i>Organic Letters</i> , 2000 , 2, 1473-5	6.2 24
116	Engineering nanoparticle antitoxins utilizing aromatic interactions. <i>Biomacromolecules</i> , 2014 , 15, 3290-56.9	23
115	Synthesis of Linear β -Olefins via Polyhomologation. <i>Macromolecules</i> , 2005 , 38, 7286-7291	5.5 23
114	Preparation of perhydroisoquinolines via the intramolecular Diels-Alder reaction of N-3,5-hexadienoyl ethyl acrylimidates: a formal synthesis of (+/-)-reserpine. <i>Journal of Organic Chemistry</i> , 2003 , 68, 5274-85	4.2 23
113	The chemistry of C-aromatic taxane derivatives atropisomer control of reaction stereochemistry. <i>Tetrahedron</i> , 1992 , 48, 7013-7032	2.4 23
112	Measuring Protein Binding to Individual Hydrogel Nanoparticles with Single-Nanoparticle Surface Plasmon Resonance Imaging Microscopy. <i>Journal of Physical Chemistry C</i> , 2016 , 120, 16843-16849	3.8 23
111	Synthesis of 1-boraadamantaneamine derivatives with selective astrocyte vs C6 glioma antiproliferative activity. A novel class of anti-hepatitis C agents with potential to bind CD81. <i>Journal of Medicinal Chemistry</i> , 2003 , 46, 2823-33	8.3 22
110	. <i>Chemistry - A European Journal</i> , 2000 , 6, 1113-1119	4.8 21
109	Bridged to fused ring interchange. The total synthesis of (β)-ledol. <i>Tetrahedron Letters</i> , 1996 , 37, 949-952	21
108	Applications of bridgehead alkenes to organic synthesis. Regio- and stereochemical control in the Diels-Alder route to polyfunctional cyclohexenes and cyclohexanes. <i>Journal of the American Chemical Society</i> , 1980 , 102, 4544-4546	16.4 21
107	Engineered nanoparticles bind elapid snake venom toxins and inhibit venom-induced dermonecrosis. <i>PLoS Neglected Tropical Diseases</i> , 2018 , 12, e0006736	4.8 21
106	Total Synthesis of a Plocamium Monoterpene Marine Natural Product. Synthetic Applications of Bridgehead Allylsilanes. <i>Journal of Organic Chemistry</i> , 1997 , 62, 8962-8963	4.2 20
105	The Type 2 Intramolecular Diels-Alder Reaction: Synthesis and Chemistry of Bridgehead Alkenes. <i>Angewandte Chemie - International Edition</i> , 2001 , 40, 820-849	16.4 20
104	Synthesis of surfactant-free hydroxypropylcellulose nanogel and its dual-responsive properties. <i>Carbohydrate Polymers</i> , 2015 , 134, 385-9	10.3 19
103	Reaction of Boranes with TMS Diazomethane and Dimethylsulfoxonium Methylide. Synthesis of Poly(methylidene-co-TMSmethylidene) Random Copolymers. <i>Macromolecular Rapid Communications</i> , 2006 , 27, 1223-1228	4.8 19

102	Integrated Chemical Systems: The Simultaneous Formation of Hybrid Nanocomposites of Iron Oxide and Organo Silsesquioxanes. <i>Chemistry of Materials</i> , 2005 , 17, 1358-1366	9.6	19
101	Repetitive sp ³ Carbon-Carbon Bond-Forming Copolymerizations of Primary and Tertiary Ylides. Synthesis of Substituted Carbon Backbone Polymers: Poly(cyclopropylidene-co-methylidene). <i>Macromolecules</i> , 2006 , 39, 4948-4952	5.5	19
100	Fluorescence probes in polymer chemistry. Application of 5-(dimethylamino)-1-naphthalenesulfonamides to the study of solvation of polystyrene-divinylbenzene copolymers. <i>Macromolecules</i> , 1984 , 17, 296-300	5.5	19
99	Dyeing and Functionalization of Wearable Silk Fibroin/Cellulose Composite by Nanocolloidal Array. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 39163-39170	9.5	18
98	Synthesis of surfactant-free hydroxypropyl methylcellulose nanogels for controlled release of insulin. <i>Carbohydrate Polymers</i> , 2016 , 151, 1006-1011	10.3	18
97	Progress toward the total synthesis of N-methylwelwitindolinone B isothiocyanate. <i>Organic Letters</i> , 2014 , 16, 4460-3	6.2	18
96	Temperature-Responsive Catch and Release of Proteins by using Multifunctional Polymer-Based Nanoparticles. <i>Angewandte Chemie</i> , 2012 , 124, 2455-2458	3.6	18
95	The effect of a donor's history of active substance on outcomes following orthotopic heart transplantation. <i>European Journal of Cardio-thoracic Surgery</i> , 2007 , 31, 452-6; discussion 456	3	17
94	Arylene- and alkylene-bridged siliconates. <i>Organometallics</i> , 1993 , 12, 1484-1488	3.8	17
93	Reversal of regioselectivity in the kinetic vs. thermodynamic enolization of bicyclic ketones. Direct bridgehead functionalization of the bicyclo[5.3.1]undecane ring system. <i>Tetrahedron Letters</i> , 1992 , 33, 4261-4264	2	17
92	Bioinspired Lotus-like Self-Illuminous Coating. <i>ACS Applied Materials & Interfaces</i> , 2015 , 7, 18424-8	9.5	16
91	Gradient Methylidene-Ethylidene Copolymer via C1 Polymerization: an Ersatz Gradient Ethylene-Propylene Copolymer. <i>ACS Macro Letters</i> , 2015 , 4, 584-587	6.6	16
90	Role of chiral auxiliaries in the type 2 intramolecular Diels-Alder reaction. Influence on diastereoselectivity. <i>Tetrahedron Letters</i> , 1994 , 35, 7311-7314	2	16
89	Molecularly imprinted hollow sphere array for the sensing of proteins. <i>Journal of Biophotonics</i> , 2015 , 8, 838-45	3.1	14
88	Preparation of redox- and photo-responsive ferrocene- and azobenzene-based polymer films and their properties. <i>European Polymer Journal</i> , 2018 , 100, 103-110	5.2	14
87	Influence of the alkoxide group, solvent, catalyst, and concentration on the gelation and porosity of hexylene-bridged polysilsesquioxanes. <i>Journal of Non-Crystalline Solids</i> , 2013 , 362, 82-94	3.9	14
86	Microwave assisted synthesis of bridgehead alkenes. <i>Organic Letters</i> , 2011 , 13, 1781-3	6.2	14
85	Sequestering and inhibiting a vascular endothelial growth factor in vivo by systemic administration of a synthetic polymer nanoparticle. <i>Journal of Controlled Release</i> , 2019 , 295, 13-20	11.7	14

84	Synthetic Polymer Affinity Ligand for Bacillus thuringiensis (Bt) Cry1Ab/Ac Protein: The Use of Biomimicry Based on the Bt Protein-Insect Receptor Binding Mechanism. <i>Journal of the American Chemical Society</i> , 2018 , 140, 6853-6864	16.4	14
83	Molecular Imprinted Receptors in Sol-Gel Materials for Aqueous Phase Recognition of Phosphates and Phosphonates. <i>ACS Symposium Series</i> , 1998 , 314-323	0.4	13
82	Preparation of Aryl-Bridged Polysilsesquioxane Aerogels. <i>Materials Research Society Symposia Proceedings</i> , 1992 , 271, 699		13
81	Mechanisms of energy storage and release. Chemiluminescent valence isomerizations. Evidence for a Dewar benzene intermediate in a bicyclopentenyl to benzene rearrangement. <i>Journal of the American Chemical Society</i> , 1975 , 97, 4758-4760	16.4	13
80	Tuning Hydrophobicity in Abiotic Affinity Reagents: Polymer Hydrogel Affinity Reagents for Molecules with Lipid-like Domains. <i>Biomacromolecules</i> , 2016 , 17, 1860-8	6.9	13
79	Hydrocarbon Waxes from a Salt in Water: The C1 Polymerization of Trimethylsulfoxonium Halide. <i>ACS Macro Letters</i> , 2012 , 1, 560-563	6.6	12
78	Enantioselective synthesis of bridged bicyclic ring systems. <i>Journal of Organic Chemistry</i> , 2007 , 72, 9402-4.2	5.2	12
77	On the relative migratory aptitudes of carbon and heteroatoms in borate complexes. A surprising alpha-thia effect. <i>Chemical Communications</i> , 2004 , 830-1	5.8	12
76	Vinyl imidates in cycloaddition reactions: a formal synthesis of (+/-)-reserpine. <i>Organic Letters</i> , 2001 , 3, 2265-7	6.2	12
75	Tandem hetero diels-alder reaction: synthesis of oxygenated macrocycles. <i>Organic Letters</i> , 2001 , 3, 723-6.2	6.2	12
74	Polymerization mechanism of poly(ethylene glycol dimethacrylate) fragrance nanocapsules. <i>RSC Advances</i> , 2015 , 5, 96067-96073	3.7	11
73	Survival is not compromised in donor hearts with echocardiographic abnormalities. <i>Journal of Surgical Research</i> , 2007 , 143, 141-4	2.5	11
72	Novel trifunctional building blocks for fluorescent polymers. <i>Organic Letters</i> , 2003 , 5, 3895-8	6.2	11
71	Investigation of the transmission of substituent effects by 29Si NMR. <i>Perkin Transactions II RSC</i> , 2000 , 545-549		11
70	Stereoselective elaboration of the tricyclo[9.3.1.03,8]pentadecane ring system. Atropisomeric control of stereochemistry. <i>Tetrahedron Letters</i> , 1992 , 33, 4695-4698	2	11
69	Abiotic Mimic of Endogenous Tissue Inhibitors of Metalloproteinases: Engineering Synthetic Polymer Nanoparticles for Use as a Broad-Spectrum Metalloproteinase Inhibitor. <i>Journal of the American Chemical Society</i> , 2020 , 142, 2338-2345	16.4	10
68	Preparation of nanogel-immobilized porous gel beads for affinity separation of proteins: fusion of nano and micro gel materials. <i>Polymer Journal</i> , 2015 , 47, 220-225	2.7	10
67	Das Tricyclo[9.3.1.0]pentadecan-System [Einfache Synthese des Taxangeräts mit einem aromatischen C-Ring. <i>Angewandte Chemie</i> , 2006 , 95, 422-423	3.6	10

66	Progress toward the total synthesis of (+)-aldosterone: synthesis of the A-D rings. <i>Organic Letters</i> , 2003 , 5, 1613-6	6.2	10
65	Aryl-Bridged Polysilsesquioxanes - New Microporous Materials. <i>Materials Research Society Symposia Proceedings</i> , 1990 , 180, 975		10
64	Detection of lysozyme in body fluid based on two-dimensional colloidal crystal sensor. <i>Microchemical Journal</i> , 2020 , 157, 105073	4.8	9
63	Self-assembly of a nano hydrogel colloidal array for the sensing of humidity.. <i>RSC Advances</i> , 2018 , 8, 9963-9969		9
62	Synthesis of High Molecular Weight Polymethylene via C1 Polymerization. The Role of Oxygenated Impurities and Their Influence on Polydispersity. <i>Macromolecules</i> , 2014 , 47, 5484-5491	5.5	9
61	Self-assembly of the polymer brush-grafted silica colloidal array for recognition of proteins. <i>Analytical and Bioanalytical Chemistry</i> , 2017 , 409, 5319-5326	4.4	9
60	Chiral Polymers of Intrinsic Microporosity: Selective Membrane Permeation of Enantiomers. <i>Angewandte Chemie</i> , 2015 , 127, 11366-11370	3.6	9
59	Origins of regio- and stereochemistry in type 2 intramolecular N-acylnitroso Diels-Alder reactions: a computational study of tether length and substituent effects. <i>Journal of Organic Chemistry</i> , 2013 , 78, 4090-8	4.2	9
58	Synthesis and first molecular structure of a bis-2-spiro-1-boraadamantane derivative. <i>Organic Letters</i> , 2004 , 6, 313-6	6.2	9
57	Mechanismus der thermischen umwandlung von 3,3?-Bicyclopropenylen in Benzol-Derivate. <i>Angewandte Chemie</i> , 1976 , 88, 254-255	3.6	9
56	Engineering the Binding Kinetics of Synthetic Polymer Nanoparticles for siRNA Delivery. <i>Biomacromolecules</i> , 2019 , 20, 3648-3657	6.9	8
55	Redox/temperature responsive nonionic nanogel and photonic crystal hydrogel: Comparison between N, N?-Bis(acryloyl)cystamine and N, N?-methylenebisacrylamide. <i>Polymer</i> , 2018 , 137, 112-121	3.9	8
54	Synthesis of Poly(methylene-b-E-caprolactone) and Poly(E-caprolactone) with Linear Alkyl End Groups: Synthesis, Characterization, Phase Behavior, and Compatibilization Efficacy. <i>Industrial & Engineering Chemistry Research</i> , 2017 , 56, 10366-10383	3.9	8
53	Synthesis and chemistry of bridgehead allylsilanes. Stereoselective reactions with aldehydes. <i>Organic Letters</i> , 2005 , 7, 3913-6	6.2	8
52	Engineering of Porosity in Amorphous Materials. Plasma Oxidation of Hydrocarbon Templates in Polysilsesquioxanes. <i>Materials Research Society Symposia Proceedings</i> , 1994 , 346, 825		8
51	Thermal rearrangement of 3,6-dimethylidene-1,7-octadiene. An intramolecular cycloaddition reaction. <i>Tetrahedron Letters</i> , 1978 , 19, 2283-2286	2	8
50	Diastereomeric transition states. High and low energy reaction pathways in the Cope rearrangement. <i>Journal of the American Chemical Society</i> , 1978 , 100, 654-655	16.4	8
49	Synthesis and thermal rearrangements of methylenecyclobutanes. <i>Journal of Organic Chemistry</i> , 1978 , 43, 2710-2711	4.2	8

48	Metabolite Responsive Nanoparticle-Protein Complex. <i>Biomacromolecules</i> , 2019 , 20, 2703-2712	6.9	7
47	Studies toward the synthesis of β -stenine. <i>Tetrahedron Letters</i> , 2015 , 56, 3497-3499	2	7
46	Ischemic stroke because of intracranial fibromuscular dysplasia. <i>Pediatric Neurology</i> , 2011 , 44, 214-7	2.9	7
45	Asymmetric bisboranes as bidentate catalysts for carbonyl substrates. <i>Organic Letters</i> , 2009 , 11, 713-5	6.2	7
44	Dialkylencarbonate-Bridged Polysilsesquioxanes: Hybrid Organic-Inorganic Sol-Gels with a Thermally Labile Bridging Group. <i>Materials Research Society Symposia Proceedings</i> , 1999 , 576, 99		7
43	Plasma Oxidation of Hydrocarbon Templates in Bridged Polysilsesquioxanes. <i>ACS Symposium Series</i> , 1994 , 122-133	0.4	7
42	The Tricyclo[9.3.1.03,8]pentadecane Ring System. A Short Synthesis of the C-Aromatic Taxane Skeleton. <i>Angewandte Chemie International Edition in English</i> , 1983 , 22, 564-570		7
41	Methylene-bridged polysilsesquioxanes: substitution of a methylene spacer within a silicate matrix. <i>Journal of Materials Science</i> , 2014 , 49, 5006-5016	4.3	6
40	Origin of Porosity in Arylene-Bridged Polysilsesquioxanes. <i>Materials Research Society Symposia Proceedings</i> , 1996 , 435, 301		6
39	Convenient Controlled Aqueous C1 Synthesis of Long-Chain Aliphatic AB, AA, and BB Macromonomers for the Synthesis of Polyesters with Tunable Hydrocarbon Chain Segments. <i>ACS Macro Letters</i> , 2016 , 5, 854-857	6.6	6
38	Copolymers from a Single Monomer: Synthesis of Poly(methylidene-co-trimethylsilylmethylidene). <i>Macromolecules</i> , 2006 , 39, 7196-7198	5.5	5
37	Thermal stability and kinetics of ylido-borane complexes. <i>Thermochimica Acta</i> , 2004 , 424, 149-155	2.9	5
36	Synthesis and Characterization of Mixed Metal Oxide Nanocomposite Energetic Materials. <i>Materials Research Society Symposia Proceedings</i> , 2003 , 800, 109		5
35	Bridged polygermsesquioxanes. Organically modified germanium oxide materials. <i>Chemistry of Materials</i> , 1993 , 5, 1193-1195	9.6	5
34	Preparation and Characterization of Ultra-Small Sized Metal and Semiconductor Particles in Sol-Gel Materials. <i>Materials Research Society Symposia Proceedings</i> , 1994 , 346, 763		5
33	Structural studies of 2-(p-chlorophenyl)-2-methyl-5-phenyl-1,3-dioxane. <i>Journal of Organic Chemistry</i> , 1985 , 50, 4439-4442	4.2	5
32	In situ formed thermogelable hydrogel photonic crystals assembled by thermosensitive IPNs. <i>Materials Horizons</i> , 2021 , 8, 932-938	14.4	5
31	Metal-Free Polymer-Based Affinity Medium for Selective Purification of His6-Tagged Proteins. <i>Biomacromolecules</i> , 2021 , 22, 1695-1705	6.9	5

30	Monodisperse oligo(ϵ -valerolactones) and oligo(ϵ -caprolactones) with docosyl (C22) end-groups. <i>Polymer Chemistry</i> , 2020 , 11, 4228-4236	4.9	4
29	Polymer Nanoparticle Hydrogels with Autonomous Affinity Switching for the Protection of Proteins from Thermal Stress. <i>Angewandte Chemie</i> , 2014 , 126, 9429-9433	3.6	4
28	Concerns for the reliability and validity of the National Stroke Project Stroke Severity Scale. <i>Cerebrovascular Diseases</i> , 2011 , 32, 426-30	3.2	4
27	Hexylene- and Phenylene-Bridged Polysiloxane Network Materials. <i>ACS Symposium Series</i> , 1995 , 264-277	0.4	4
26	Mechanism of the Thermal Conversion of 3,3'-Bicyclo-propenyls into Benzene Derivatives. <i>Angewandte Chemie International Edition in English</i> , 1976 , 15, 232-234		4
25	Investigating PLGA microparticle swelling behavior reveals an interplay of expansive intermolecular forces. <i>Scientific Reports</i> , 2021 , 11, 14512	4.9	4
24	A biomass based photonic crystal made of Konjac tofu. <i>Chinese Chemical Letters</i> , 2021 , 32, 587-590	8.1	4
23	Polyhomologation: The Living Polymerization of Ylides 2011 , 349-376		3
22	Stereoselective synthesis of an advanced taxusin intermediate: an application of the type 2 intramolecular Diels-Alder reaction. <i>Tetrahedron Letters</i> , 2003 , 44, 9379-9382	2	3
21	Reactions of alkylcyclopropanes with bromine and with hydrogen bromide. <i>Journal of the American Chemical Society</i> , 1976 , 98, 1195-1204	16.4	3
20	Abiotic Stimuli-Responsive Protein Affinity Reagent for IgG. <i>Biomacromolecules</i> , 2021 , 22, 2641-2648	6.9	3
19	Synthetic hydrogel nanoparticles for sepsis therapy. <i>Nature Communications</i> , 2021 , 12, 5552	17.4	3
18	Rectangular chain packing of methyl-branched paraffins: persistence of an interchain interaction and forms of disorder. <i>Journal of Physical Chemistry B</i> , 2011 , 115, 8858-63	3.4	2
17	Hypervalent Spiro Polysiliconate and Polygermylate Ionomers. <i>ACS Symposium Series</i> , 1995 , 248-263	0.4	2
16	Intramolecular Condensation Reactions of β , γ -BIS(Triethoxysilyl) Alkanes. Formation of Cyclic disilsesquioxanes. <i>Materials Research Society Symposia Proceedings</i> , 1996 , 435, 33		2
15	1,4-, 1,5-, and 1,6-Dibromoalkanes from ionic reaction of bromine with butylcyclopropane. <i>Journal of the American Chemical Society</i> , 1973 , 95, 5089-5090	16.4	2
14	On the Relationship between Strain and Chemical Reactivity of Torsionally Distorted Carbon-Carbon Double Bonds 1989 , 133-141		2
13	Synthesis of a High Affinity Complementary Peptide-Polymer Nanoparticle (NP) Pair Using Phage Display.. <i>ACS Applied Bio Materials</i> , 2021 , 4, 2704-2712	4.1	2

12	Evolution of Porosity and Morphology in Alkylene-Bridged Polysilsesquioxane Xerogels as a Function of Gel Aging Time. <i>Materials Research Society Symposia Proceedings</i> , 2004 , 847, 65		1
11	Oligonucleotide Imprinting in Aqueous Environment. <i>Materials Research Society Symposia Proceedings</i> , 2002 , 723, 531		1
10	Hypervalent Silicate Materials. Synthesis and Characterization of Novel Ladder and Network Ionomers. <i>Materials Research Society Symposia Proceedings</i> , 1992 , 271, 711		1
9	Engineered polymer nanoparticles incorporating l-amino acid groups as affinity reagents for fibrinogen. <i>Journal of Pharmaceutical Analysis</i> , 2021 , 11, 596-602	14	1
8	A Biomimetic of Endogenous Tissue Inhibitors of Metalloproteinases: Inhibition Mechanism and Contribution of Composition, Polymer Size, and Shape to the Inhibitory Effect. <i>Nano Letters</i> , 2021 , 21, 5663-5670	11.5	1
7	Abiotic Mimic of Matrix Metalloproteinase-9 Inhibitor against Advanced Metastatic Cancer. <i>ACS Biomaterials Science and Engineering</i> , 2021 , 7, 3190-3200	5.5	0
6	New Version of Laser Device Materials for Developing Diffraction Beam Modulators; Novel Nano-periodic Structures. <i>Materials Research Society Symposia Proceedings</i> , 2009 , 1176, 11		
5	Optical Glass Effectively Generating a Large Acoustic Wave for Diffraction Beam Modulator Applications. <i>Journal of Physical Chemistry C</i> , 2008 , 112, 18173-18177	3.8	
4	Collapse of Porosity During Drying of Alkylene-Bridged Polysilsesquioxane Gels. Influence of the Bridging Group Length. <i>Materials Research Society Symposia Proceedings</i> , 2004 , 847, 531		
3	A Fabrication of a Novel Microfluidic Reactor Microsynthesis of MIP's Particles. <i>Materials Research Society Symposia Proceedings</i> , 2005 , 872, 1		
2	Hydrocarbon-Bridged Polysiloxane and Polysilsesquioxane Network Materials.. <i>Materials Research Society Symposia Proceedings</i> , 1994 , 346, 487		
1	Gas phase nucleophilic substitution reactions; Transaminations of silanamines. <i>Journal of Organometallic Chemistry</i> , 1978 , 156, 323-329	2.3	